

SAF-RC-001
Industrial Hygiene Sampling
FINAL DATA

NO DISTRIBUTION REQUIRED

COMMENTS:

SDG

06I-0213-02

SAF-RC-001

Rad only ☒ Chem only Rad & Chem

☒ Complete

Partial

300 Area 303M Bldg

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EDMC



Cover Page

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Report Identification Number: 06I-0213-02
Subcontract Number: 0000X-BO-G0058-B-Mod#4
Name of Industrial Hygienist: Denise A. Pitts / Henry W. Ruby
Laboratory Identification Number: DCHM
SAF#: RC-001 / R303M0 J451
Payroll#: 73513



Sample Information

Sample Date	Customer Sample Number	Laboratory Sample Number	Method	Analytical Batch Identification	Sample Matrix
19 Jan 2006	J10XL1	06I01763	NMAM 7300M	G060M00P	G WIPE
19 Jan 2006	J10XL2	06I01764	NMAM 7300M	G060M00P	G WIPE
19 Jan 2006	J10XL3	06I01765	NMAM 7300M	G060M00P	G WIPE
19 Jan 2006	J10XL4	06I01766	NMAM 7300M	G060M00P	G WIPE
19 Jan 2006	J10XL5	06I01767	NMAM 7300M	G060M00P	G WIPE

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Name: Lisa M. Reid
Title: Chemist
Date: January 23, 2006



Case Narrative Page

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Report Identification Number: 06I-0213-02
Subcontract Number: 0000X-BO-G0058-B-Mod#4
Name of Industrial Hygienist: Denise A. Pitts / Henry W. Ruby
Laboratory Identification Number: DCHM
SAF#: RC-001 / R303M0 J451
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General Set Information: There are 5 samples in set 06I-0213-02, 4 samples in set 06I-0214-01 and 5 samples in set 06I-0215-01. The samples were analyzed for cadmium, lead and beryllium on Ghost Wipe. No problems were encountered with the receipt of these samples and no contact with the CTR was required.

Method Summary: Samples were transferred to 50 ml centrifuge tubes and digested in the presence of 5 mL of nitric acid and 5 mL of ASTM Type II water. Samples were digested in a hot block set at 110°C for 60 minutes. Samples were then diluted to a 25 mL volume with ASTM Type II Water. Samples were shaken and delivered for ICP analysis.

Sample Preparation: All samples were prepared in accordance with DCL SOP "IH-AN-021" and NIOSH method NMAM 7300 modified for hot block digestion.

Holding Times: The holding times were met for both sample preparation and analysis.

Instrument Calibration: Instrument calibration was performed in accordance with NIOSH method NMAM 7300.

Initial and Continuing Calibration Verification Analysis: Beryllium, cadmium and lead recoveries in all Initial Calibration Verification (ICV) and Continuing Calibration Verification (CCV) samples are within the quality control limits of +/- 10%.

Initial and Continuing Calibration Blank Analysis: No beryllium results were found in the Initial Calibration Blank (ICB) or Continuing Calibration Blanks (CCB) at levels above the Contract Required Detection Limits (CRDL) of 0.01 ug/sample. No cadmium results were found in the Initial Calibration Blank (ICB) or Continuing Calibration Blanks (CCB) at levels above the Contract Required Detection Limits (CRDL) of 0.1 ug/sample. No lead results were found in the Initial Calibration Blank (ICB) or Continuing Calibration Blanks (CCB) at levels above the Contract Required Detection Limits (CRDL) of 3. ug/sample.

Method Blank Analysis: No beryllium, cadmium or lead was found in any of the media blank samples above the Contract Required Detection Limit (CRDL).

Dilution(s): None.

Laboratory Control Sample and Duplicate Analysis: One Laboratory Control Sample (LCS) and one Laboratory Control Sample Duplicate (LCSD) were prepared and analyzed with the sample batch. The LCS results were within the control limits of +/- 20%. The Relative Percent Difference (RPD) between the LCS and the LCSD were within the control limit of 20%.

Replicate Analysis: Two samples in this batch were replicated. The RPD between the samples and the replicates was within the control limit of 20%. If the result of the sample or replicate is below the CRDL, replicate analysis is negligible.

Flagging Codes: None

Nonconformance/Corrective Action Report (NC/CAR): N/A

Sample Calculation: The final results are calculated by the following equation:
Final result for aqueous samples ($\mu\text{g}/\text{sample}$) = (A) x (B) x (C)

Where:

A = Analyte concentration from instrument determination ($\mu\text{g}/\text{L}$)

B = Concentration factor from sample preparation

= $\frac{\text{Final Volume of Digestate (L)}}{\text{Sample}}$

C = Dilution performed at time of analysis

Example Calculation: $(1 \mu\text{g}/\text{L}) \times (0.025 \text{ L}/\text{sample}) \times (1) = 0.025 \mu\text{g}/\text{sample}$

Miscellaneous Comments: None



Report Page

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Report Identification Number: 06I-0213-02

Subcontract Number: 0000X-BO-G0058-B-Mod#4

Name of Industrial Hygienist: Denise A. Pitts / Henry W. Ruby

Laboratory Identification Number: DCHM

SAF#: RC-001 / R303M0 J451

Payroll#: 73513

Customer Sample Number	Laboratory Sample Number	Date Analyzed	Beryllium µg/sample		Cadmium µg/sample		Lead µg/sample	
J10XL1	06I01763	20 Jan 2006	0.019		<0.1	U	<3.	U
J10XL2	06I01764	20 Jan 2006	<0.01	U	<0.1	U	<3.	U
J10XL3	06I01765	20 Jan 2006	<0.01	U	<0.1	U	<3.	U
J10XL4	06I01766	20 Jan 2006	<0.01	U	<0.1	U	<3.	U
J10XL5	06I01767	20 Jan 2006	<0.01	U	0.58		4.5	
Limit of Detection (LOD)			0.01		0.1		3.	
Required Detection Limit (RDL)								

U - Parameter not detected above LOD.

J - Parameter between LOD and RDL.



QC Summary Page

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Report Identification Number: 06I-0213-02
Subcontract Number: 0000X-BO-G0058-B-Mod#4
Name of Industrial Hygienist: Denise A. Pitts / Henry W. Ruby
Laboratory Identification Number: DCHM
SAF: RC-001 / R303M0 J451
Payroll#: 73513

Batch ID: G060M00P

QC Sample ID	QC Type	Analyte	Units	Result	Parent Result	Target	Percent Rec.	Relative Percent Diff.
BL-240257-1	MB	Beryllium	µg/sample	ND	NA	NA	NA	NA
BL-240257-1	MB	Cadmium	µg/sample	ND	NA	NA	NA	NA
BL-240257-1	MB	Lead	µg/sample	ND	NA	NA	NA	NA
QC-240257-1	LCS	Beryllium	µg/sample	11.4	NA	10.0	114.	NA
QC-240257-1	LCS	Cadmium	µg/sample	33.9	NA	30.0	113.	NA
QC-240257-1	LCS	Lead	µg/sample	106.	NA	100.	106.	NA
QD-240257-1	LCSD	Beryllium	µg/sample	11.4	11.4	10.0	114.	0.0868
QD-240257-1	LCSD	Cadmium	µg/sample	33.5	33.9	30.0	112.	1.14
QD-240257-1	LCSD	Lead	µg/sample	105.	106.	100.	105.	0.956

MB - Method Blank

LCS - Laboratory Control Sample

LCSD - Laboratory Control Sample Duplicate

MS - Matrix Spike

MSD - Matrix Spike Duplicate

LD - Laboratory Duplicate

NA - Not Applicable

ND - Parameter not detected above LOD

$LCS, LCSD \text{ Percent Rec.} = (\text{Result} / \text{Target}) * 100.0$

$MS, MSD \text{ Percent Rec.} = ((\text{Result} - \text{Parent}) / \text{Target}) * 100.0$

$LCS, LCSD \text{ Relative Percent Diff.} = (|LCS - LCSD|) / ((LCS + LCSD)/2.0) * 100.$

$MS, MSD \text{ Relative Percent Diff.} = (|MS - MSD|) / ((MS + MSD)/2.0) * 100.$

$LD \text{ Relative Percent Diff.} = (|Parent - LD|) / ((Parent + LD)/2.0) * 100$



061-0213-01, 02

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

Collector: Yethad Jones		Company Contact Denise A. Pitts and Henry W. Ruby		Telephone No. 531-1239		Project Coordinator Joan H. Kessner		Data Turnaround 24 Hour	
Payroll #: 73513		Sampling Location 300 Area		SPECIAL INSTRUCTIONS All relevant COAs must be provided: R303M0 J451		SAF No. RC-001			
Type of Sample: Air and Wipes		303M Building		ANALYSIS METHOD (SPECIFIC): N105H 7300		Method of Shipment FED EX			
Shipped To: Data Chem		Wipe Sample Media: Ghost <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Other _____				Bill of Lading/Air Bill No. 8541 9337 5340			
POSSIBLE SAMPLE HAZARD/REMARKS Pb, Cd, Be		MATRIX A - AIR W1 - WIPE X - OTHER		Preservation (i.e., cooling required, etc.)		No		No	
Special Handling and/or Storage Na						No		No	

SAMPLE ANALYSIS					Asbestos Airborne	Lead Airborne	Beryllium Airborne	Beryllium Wipe	Mold	Lead Wipe	Cd Wipe	Cd Airborne	
SAMPLE NO.	MATRIX	SAMPLE DATE	VOLUME (L) or Area cm ²	Comments									
J10XK9	A	1-19-06	268L	NA	na	X	X	01760				X	na
J10XK7	A	1-19-06	NA	Blank	na	X	X	01761				X	na
J10XK8	A	1-19-06	NA	Blank	na	X	X	01762				X	na
J10XL1	W1	1-19-06	NA	Blank	01763			X	na	X	X		
J10XL2	W1	1-19-06	NA	Blank	01764			X	na	X	X		01765
J10XL3	W1	1-19-06	100cm ²	na	01765			X	na	X	X		1-19-06
J10XL4	W1	1-19-06	100cm ²	na	01766			X	na	X	X		
J10XL5	W1	1-19-06	100cm ²	na	01767			X	na	X	X		
				01768									
				01769									

WCH-SH-202 (08/29/2005)

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DataChem Laboratories, Inc.
960 West Levoy Drive
Salt Lake City, Utah 84123-2547

Phone: (801) 266-7700
FAX: (801) 268-9992

Web Page: www.datachem.com
E-mail: lab@datachem.com

Enter on line below the first Sample Number from Page One:

J10XK9

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			
SIGN / PRINT NAMES / USE MILITARY TIME			
Released By/To:	DATE / TIME	Received By/From:	DATE / TIME
<i>[Signature]</i> Yetta D. Jones	1-19-06 1215	3746 Building, Rm 16, locked cabinet	1-19-06 1215
Released By/To:	DATE / TIME	Received By/From:	DATE / TIME
Building 3746 Rm 16 locked cabinet			
<i>[Signature]</i> Goldie Malhan	01-19-06 1510	RZ Steffler R. Z. Steffler	1-19-06 1510
Released By/To:	DATE / TIME	Received By/From:	DATE / TIME
RZ Steffler R. Z. Steffler	1-19-06 1530	Fed Ex	
Released By/To:	DATE / TIME	Received By/From:	DATE / TIME
Fed Ex		<i>[Signature]</i> Meredith Edwards	<i>[Signature]</i> 1/19/06
Released By/To:	DATE / TIME	Received By/From:	DATE / TIME
<i>[Signature]</i> me	<i>[Signature]</i> 1/19/06		
Released By/To:	DATE / TIME	Received By/From:	DATE / TIME
Released By/To:	DATE / TIME	Received By/From:	DATE / TIME
Released By/To:	DATE / TIME	Received By/From:	DATE / TIME
Released By/To:	DATE / TIME	Received By/From:	DATE / TIME
LABORATORY SECTION	Received By	Title	DATE / TIME
	<i>[Signature]</i> Meredith Edwards		<i>[Signature]</i> 1/19/06

REVIEWED BY: _____ DATE: _____
PRINT/SIGN NAME



CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

Collector: Yetta D. Jones	Company Contact Denise A. Pitts and Henry W. Ruby	Telephone No. 531-1229	Project Coordinator Joan H. Kessner	Data Turnaround
Payroll #: 73513	Sampling Location 300 Area	SPECIAL INSTRUCTIONS All relevant COAs must be provided: R303MO J461	SAF No. RC-001	24 Hour
Type of Sample: Air and Wipes	303M Building	ANALYSIS METHOD (SPECIFIC): NIOSH 7300	Method of Shipment FED EX	
Shipped To: Data Chem Salt Lake City	Wipe Sample Media: Ghost <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Other _____	Bill of Lading/Air Bill No. 8541 9337 5340		

POSSIBLE SAMPLE HAZARD/REMARKS Pb, Cd, Be	MATRIX A - AIR WI - WIPE X - OTHER	Preservation (i.e., cooling required, etc.)	No	No	No	No	No	No	No	No	na
Special Handling and/or Storage Na											

SAMPLE ANALYSIS

SAMPLE NO.	MATRIX	SAMPLE DATE	VOLUME (L) or Area ____ cm ²	Comments	Asbestos Airborne	Lead Airborne	Beryllium Airborne	Beryllium Wipe	Mold	Lead Wipe	Cd Wipe	Cd Airborne	na
J10XK9	A	1-19-06	268L	NA	na	X	X					X	na
J10XK7	A	1-19-06	NA	Blank	na	X	X					X	na
J10XK8	A	1-19-06	NA	Blank	na	X	X		HA-06			X	na
J10XL1	WI	1-19-06	NA	Blank				X	na	X	X		
J10XL2	WI	1-19-06	NA	Blank				X	na	X	X		
J10XL3	WI	1-19-06	100cm ²	na	1-19-06			X	na	X	X	1-19-06	
J10XL4	WI	1-19-06	100cm ²	na				X	na	X	X		
J10XL5	WI	1-19-06	100cm ²	na				X	na	X	X		
				ydj									
				1-19-06									

COPY
FIELD SAMPLE COPY
FIELD SAMPLE COPY

Enter on line below the first Sample Number from Page One:

J10XK9

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

SIGN / PRINT NAMES / USE MILITARY TIME

Relinquished By/Stored: <i>[Signature]</i> Yetta D. Jones DATE / TIME: 1-19-06 1215 Relinquished By/Stored: Building 3746 Rm #16 locked cabinet Relinquished By/Stored: Goldie Malhan Goldie Malhan DATE / TIME: 01-19-06 1510 Relinquished By/Stored: RZ Steffler R.Z. Steffler DATE / TIME: 1-19-06 1530	Received By/Stored: 3746 Building, Rm 16, locked cabinet DATE / TIME: 1-19-06 1215 Received By/Stored: RZ Steffler R.Z. Steffler DATE / TIME: 1-19-06 1510 Received By/Stored: Fed Ex DATE / TIME:
Relinquished By/Stored:	Received By/Stored:
DATE / TIME:	DATE / TIME:
Relinquished By/Stored:	Received By/Stored:
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Relinquished By/Stored:	Received By/Stored:
DATE / TIME:	DATE / TIME:
LABORATORY SECTION	Received By: _____ Title: _____ DATE / TIME: _____

COPY

FIELD SAMPLE COPY

REVIEWED BY: _____ DATE: _____

PRINT/SIGN NAME